

# Work Order ID 61951

Monday, September 13, 2010 8:21:23 AM



Page 1

Item ID: D412-711-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Bubble Window

Start Date: 9/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/20/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: H Date: 10-9-13 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D412-711-101	A								
100		0.00							
DC		0.00							
Document Control	Memo Photocopy bluefiles and create labels for PPP D412-711-101 Change 002								
110		0.00							
HandThermo	HAND FINISHING THERMOFORMING	0.00							
Hand Finishing Thermoforming	Memo Set up Machine as per folio FTA 077 and D711W program								
120		0.00							
HandThermo	HAND FINISHING THERMOFORMING	0.00							
Hand Finishing Thermoforming	Memo Cut Blanks to 36" by 39"								

HJ BG 10-9-27

8 10/09/23

Yh (X) 10/09/20

BB (X) 10/09/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61951**

Monday, September 13, 2010 8:21:23 AM

Page 2

Item ID: D412-711-101

Accept

Revision ID:

Item Name: Replacement Bubble Window

Start Date: 9/13/2010 Start Qty: 1.00

Required Date: 9/20/2010 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130



Thermoform

Thermoforming Machine

THERMOFORMING MACHINE

Memo

Thermoform as per Dwg. D412-711-101 using DT 9640 and Folio FTA  
077 Dwg. Rev. 11 Folio Rev.

0.00

0.00

11 (X) 10/09/20

140



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

1) Check Surface finish for undesired marks, voids, dimples etc. 2) Check  
depth of bubble to ensure conformity to drawing tolerances.

0.00

0.00

11 (X) 10/09/20

150



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

11 (X) 10/09/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61951**

Monday, September 13, 2010 8:21:23 AM



Page 3

Item ID: D412-711-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Bubble Window

Start Date: 9/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  HandThermo	HAND FINISHING THERMOFORMING	0.00							
Hand Finishing Thermoforming	Memo 1) Trim off excess flange material 2) Buff out any light scratches or 3) Etch part number and batch number	0.00							 
170  QC	QC2- Inspect parts off machine FAI/FAIB	0.00							
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							
180  QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61951**

Monday, September 13, 2010 8:21:23 AM



Page 4

Item ID: D412-711-101

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Bubble Window

Start Date: 9/13/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/20/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

185

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

8/10/09/123

②

190

Identify as per dwg &amp; Stock Location: 80

0.00



Packaging

Memo

0.00

Packaging

Rauc

10/9/23 sf

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/27 JF

MF  
10-9-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Monday, September 13, 2010 8:21:29 AM

Page 1

Work Order ID: 61951



Parent Item: D412-711-101



Parent Item Name: Replacement Bubble Window

Start Date: 9/13/2010

Required Date: 9/20/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-02-01 JLM  
Manufacture in-house 10/06/28 DL

IPP Rev. B.

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MACRLICS.236 		Purchased	No				sf	113.0000	16	16			

Plexiglass G .236"

Location

Loc Qty

Loc Code

therm

113

113571

17

115096

16

115590

80

20.5g AL 10/09/21 Wk

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 161951
<b>Description:</b>	<b>Part Number:</b> 412-711-101
<b>Inspection Dwg:</b> 412711-101 <b>Rev:</b> A	<b>Page 1 of 1</b>

**FIRST ARTICLE INSPECTION CHECKLIST**  
**THERMOFORMING SECTION**

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

**Measured by:** W.H.

**Date:** 10/09/20

**TRIMMING SECTION**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.0"	± 0.030	2.03"	✓			
1.73"	± 0.030	1.76"	✓			
1.98"	± 0.030	2.00"	✓			
1.50"	± 0.030	1.53"	✓			
0.090"	MIN	0.101"	✓			
0.070"	MIN	0.101"	✓			
0.050"	MIN	0.080"	✓			

**Measured by:** W.H.

**Date:** 10/09/21

**Audited by:** S

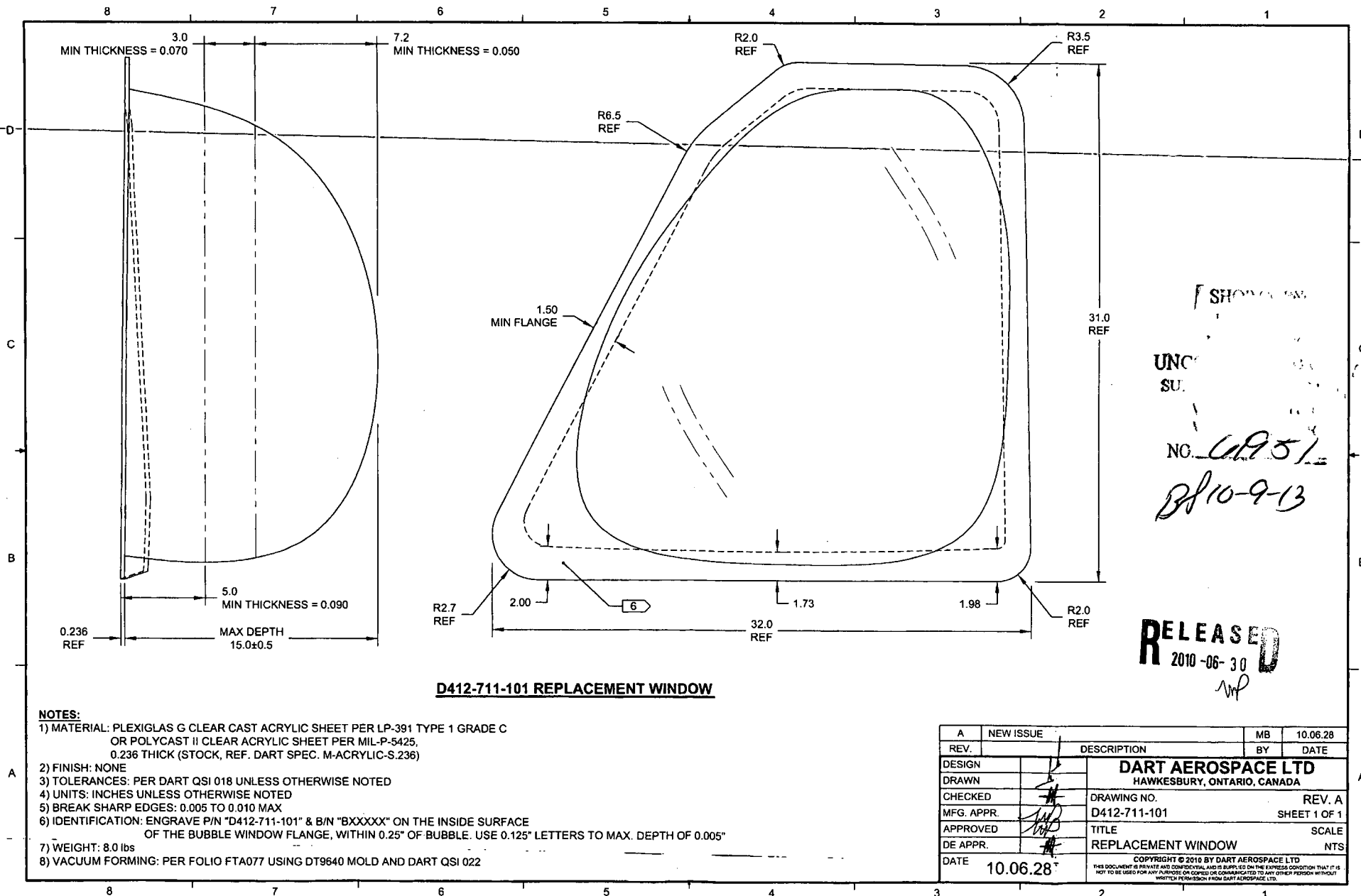
**Date:** 10/09/21

**Preliminary Approval:**

**Date:**

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries